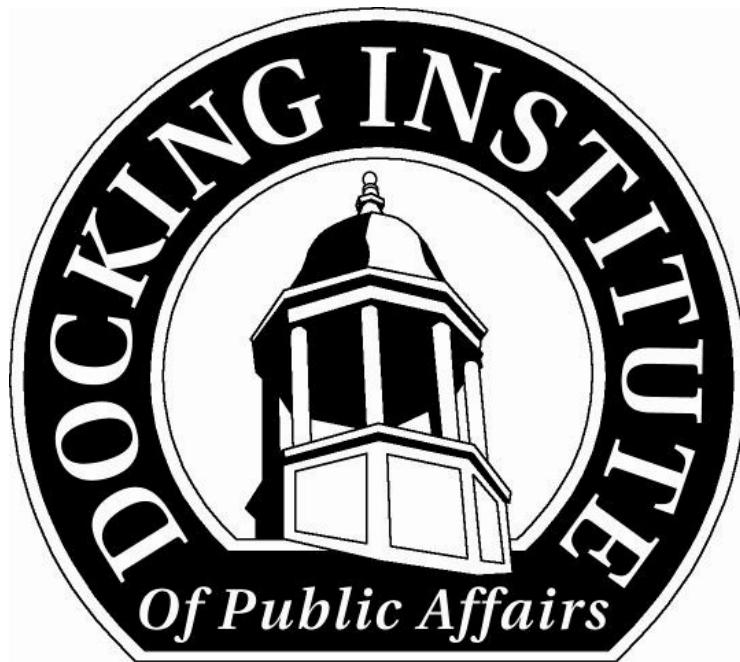
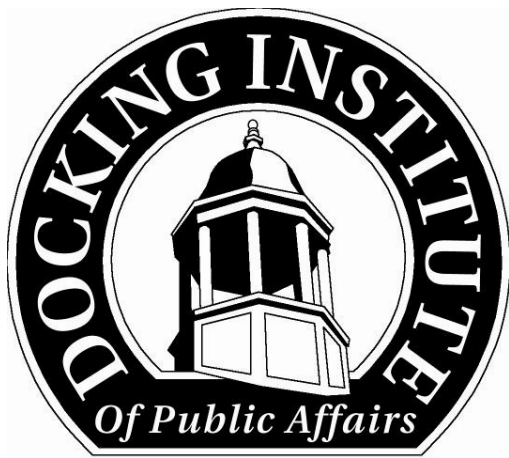


COST-BENEFIT ANALYSIS: JOHNSON COUNTY THERAPEUTIC COMMUNITY PROGRAM



**Fort Hays State University
600 Park Street
Hays, Kansas 67601**

January 2006



Fort Hays State University
600 Park Street
Hays, Kansas 67601-4099
Telephone: (785) 628-4197
FAX: (785) 628-4188
www.fhsu.edu/docking

Brett A. Zollinger, Ph.D.
Director

Michael S. Walker, M.S.
Research Scientist

Laure Gross
Administrative Assistant

Bill Rickman, Ph.D.
Policy Fellow

Joyce Wolfe, M.S.
UCSR Manager

Leslie Z. Paige, M.S., EdS.
Grants Facilitator

Carl D. Parker, Ph.D.
Policy Fellow

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Report by

Carl D. Parker, Ph.D.

Policy Fellow

Bill D. Rickman, Ph.D.

Policy Fellow

and

Joyce Wolfe, M.S.

Research Associate

The Docking Institute of Public Affairs

Fort Hays State University

600 Park Street

Hays, Kansas 67601

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Executive Summary

This report presents a Cost–Benefit Analysis (CBA) of the Johnson County Therapeutic Community Program (JCTC). The Johnson County Department of Corrections has operated the JCTC since February 1998. The JCTC program has two components, a six-month therapeutic community program (TC) and a four-month residential program. The profile of clients accepted into the JCTC is unique compared to clients in other therapeutic communities. Clients have histories of multiple arrests, chronic hard-core substance abuse, and failed prior treatments. In general, the purpose of a CBA is to comprehensively identify and measure all relevant economic costs and economic benefits of a program that accrue to determine whether the costs exceed the benefits. The results of this CBA applied to the JCTC program can be summarized as:

- The economic costs of the program are estimated to be \$1,543,420.
- The economic benefits of the program are estimated to be \$2,637,117.
- The benefit to cost ratio is 1.71.

The Drug Abuse Treatment Cost Analysis Program (DATCAP) provided the general framework to organize the cost categories for the JCTC program. Since the JCTC Program involved a therapeutic community and a residential component, a more detailed spreadsheet was required than that associated with the DATCAP template spreadsheet. Detailed program costs, specific to the JCTC program are provided in (page 14). Costs were allocated to both TC and the residential components of the JCTC Program, and the methods of allocation are also discussed in the report. Detailed cost calculations, such as volunteer labor and facility usage costs, are presented and discussed. **The economic cost estimate for FY04 for the JCTC is \$1,543,420.**

Benefits of the JCTC program were identified and valued, for present and future time periods. Data is not available to allow pre- and post-mean differences to be measured;

consequently, economic benefits attributed to the JCTC program could not be estimated solely from in-house data. One exception is the benefit of avoided prison costs for which JCTC data was available to estimate a significant portion of these economic benefits. Avoided prison costs represent the category with the greatest amount of total benefits. An attempt to collect data using a client survey was undertaken, but did not generate successful results. Given the nature of the population surveyed, this retrospective survey methodology is not well-suited to the collection of valid and reliable data. To improve CBA research in the future, it is recommended this data should be collected during mandated intake and follow-up sessions (six months, one year, etc.) coordinated by the program. In the absence of specific in-house data to estimate most benefits of the JCTC program, monetary conversion factors and data from other drug treatment studies were adapted and applied to generate benefit estimates for the JCTC program.

The major benefits estimated for the JCTC program are similar to those found in CBA of other drug abuse treatment programs. The benefits estimated were: avoided prison costs, avoided crime costs, employment benefits, and avoided health costs. **The total benefit summed across these particular benefits in present value terms is \$2,637,117.**

A conservative approach was taken when estimating benefits. Not all benefits could be included because of a lack of data or the ability to measure certain types of benefits. A discussion of these benefits is provided in the report. Benefits from avoided prison costs alone total \$2,255,526 and exceed the FY04 JCTC total costs of \$1,543,420. Considering the present value of all estimated benefits for the JCTC program is \$2,637,117, a benefit/cost ratio of 1.71 was estimated. This ratio means that for every dollar spent on the JCTC program, society receives an estimated \$1.71 in benefits. Because of data limitations, and specifically, the inability to measure certain benefits with high precision, the question of the extent to which benefits exceed costs can

only be estimated. However, confidence can be placed in the fact that the benefit/cost ratio is greater than one, meaning that social benefits exceed economic costs.

Introduction

The general model framework developed in a separate Docking Institute report titled “Cost–Benefit Model for Kansas Substance Abuse Treatment Programs” was applied to the Johnson County Therapeutic Community program. The results of the model’s application are presented in this report.

Cost-Benefit Analysis (CBA) is widely recognized in the literature as the analysis of choice for evaluations of substance abuse prevention and treatment programs. As noted in the separate report, CBA is a straightforward analytical framework, however, its application involves a number of important considerations. The purpose of CBA is to comprehensively identify and measure all relevant economic costs and economic benefits of a program that accrue to determine whether costs exceed benefits. Both costs and benefits are converted into monetary terms, so a benefit to cost ratio (B/C ratio) can be calculated. When the B/C ratio is greater than 1, a program is said to be cost beneficial, in the sense that society receives a greater benefit than it costs to produce it. For example, if the benefit cost ratio is \$6.50 (\$6.50/\$1.00), this indicates that for each dollar spent on the program, \$6.50 in benefits are generated. One cannot, however, conclude that an efficient use of scarce resources is taking place without comparison to alternative uses of those resources. CBA is able to consider multiple types of outcomes associated with the program being evaluated. For substance abuse treatment, these multiple outcomes may include such subjects as crime, criminal justice expenses, health, employment, and receipt of social welfare benefits.

The general CBA model components adapted for the Johnson County Therapeutic Community are:

1. Definition of the scope of the analysis
2. Identification and estimation of relevant costs
3. Identification and estimation of relevant benefits
4. Discussion of any costs or benefits that could not be monetized
5. Discussion of the sensitivity analysis

The following sections of this report are organized around these components as specifically related to the program under review.

Definition of the Scope of the Analysis

The first step in CBA involves understanding the nature of the program being evaluated in terms of its purpose and objectives, clients served, and treatment processes used. The Johnson County Department of Corrections has operated its Therapeutic Community since February 1998 in facilities located in New Century, Kansas. The following descriptive information for the JCTC program is based on several sources: an onsite visit by a Docking Institute of Public Affairs project team, an audit report by the Commission on Accreditation for Corrections Standards Compliance Audit, several of JCTC's Byrne Grant applications, and other follow-up communications with JCTC staff.

For the purposes of internal consistency, Fiscal Year 2004 (FY04) data were collected and used in this report. FY05 cost data were not available at the time of data collection.

JCTC Facilities

The JCTC is located at the Johnson County Department of Corrections Residential Center complex, which consists of three buildings with a total space of 44,384 square feet. The Therapeutic Community (TC) is housed in an L-shaped building (Building One) constructed in 1984. Building Two was constructed from pre-fabricated materials in 1995. Building Three is a brick structure built in 1997 and has a hub/spoke layout. The main entrance to the complex and the administrative offices are located in Building Three. Buildings Two and Three house Residential Center programs.

TC clients are housed separately from the residential clients to foster an atmosphere of family and trust because of the sensitive nature of the information that may be revealed during treatment. Building One has a rated capacity and actual population of 27 clients—18 males and nine females. The 15 full-time staff include: one administrative support employee, six program staff members, six security employees and two other staff members.

Program Clients Profile

The clients for the JCTC are adults (18 years of age or older) who have histories of multiple arrests, chronic hard-core substance abuse and failed treatments. Clients have extensive histories as poly-drug users of heroin, cocaine, amphetamines, marijuana, and alcohol. Clients eligible for the JCTC program have been through the court system repeatedly and are facing a minimum of one year in jail or prison if not admitted into a long-term substance abuse program. Judges, district attorneys, and probation officers refer potential clients.

Johnson County Therapeutic Community Program

The JCTC program has two components, referred to as the Therapeutic Community Program (TC) and the Residential Program (RP). A description of each of these components is presented in the following sections.

Therapeutic Community Program Services

There are three levels for clients to complete before graduating from the Therapeutic Community. Progress through each level requires the client to complete specific assignments and goals. There is an intensive focus on how the client's drug use and criminal activity are interrelated. Each TC client receives a mental health evaluation, as well as a physical examination, to ensure the client is mentally and physically capable of undertaking the long process of intensive recovery. Drug screening is conducted randomly for each client to ensure a drug free environment. The following description for each level was edited from the Johnson County Department of Corrections Annual Comprehensive Plan.

Level 1: Orientation

Clients spend approximately two months in the orientation level. During orientation, the clients are introduced to TC concepts, treatment rules and expectations. The client and a counselor develop an individualized treatment plan. Clients are assigned a "big brother" or "big sister" who accompanies them to activities and offers constructive feedback on their progress in adapting to the TC environment. One-on-one interviews are conducted by each new "family member" with all the other members of the TC family, so that they become familiar with each other. All clients in the orientation phase must complete three phases: the thinking reports phase,

the social skills phase, and finally, the problem-solving phase in order to move on to the next level.

Level 2: Treatment

Clients spend approximately three months in the treatment level. Substance abuse is the primary focus of the program, but cognitive behavioral therapy is employed to deal with the issues involved in criminal thinking. Based on the National Institute of Corrections model, the intensive program covers 22 lessons spanning approximately three months of class work. Clients are required to review their “Thinking Processes,” and to explain how they have determined their choices in the past and how they can make better choices for their future. The basic premise of cognitive behavioral therapy is “if you can change the thinking, you can change the behavior”. Cognitive skills classes are held twice a week. Clients must demonstrate competency in the basics of the treatment level, either in writing or orally, before advancing to the next level.

The TC utilizes the National Institute of Corrections curriculum, “Thinking for a Change.” It is an integrated, cognitive behavior change program for clients, which includes cognitive restructuring, social skills development, and development of problem solving skills in 22 lessons:

- Lesson 1: Introduction and Overview
- Lesson 2: Active Listening Skills
- Lesson 3: Asking a Question
- Lesson 4: Giving Feedback
- Lesson 5: Our Thinking Controls How We Act
- Lesson 6: Paying Attention to Our Thinking
- Lesson 7: Recognizing the Thinking that Leads to Trouble
- Lesson 8: Finding New Thinking
- Lesson 9: Using Thinking Check-Ins
- Lesson 10: Knowing Your Feelings
- Lesson 11: Understanding the Feelings of Others
- Lesson 12: Responding to the Feelings of Others

Lesson 13: Preparing for a Stressful Conversation
Lesson 14: Responding to Anger
Lesson 15: Dealing with an Accusation
Lesson 16: Introduction to Problem Solving
Lesson 17: Step 1—Stop and Think
Lesson 18: Step 2—Problem Description
Lesson 19: Step 3—Getting Information to Set a Goal
Lesson 20: Step 4—Choices and Consequences
Lesson 21: Step 5—Choose, Plan, Do Step 6—Evaluate
Lesson 22: Self-Evaluation: What Else Do I Need

The lessons are delivered in small group settings by a Licensed Family therapist.

Level 3: Transition

Clients spend approximately four weeks in the transition level. Transition consists of activities aimed at increasing personal growth, and preparing the client for transition to work release into the general living population at the Residential Center. Each client develops a written relapse prevention plan identifying personal relapse warning signs, prevention steps, individual high risk situations, and coping strategies. Each client also works with a primary substance abuse counselor to develop a preliminary transition plan. The preliminary transition plan identifies goals related to issues of placement, employment, significant other involvement, educational pursuits, self-help participation, and other important community support systems.

Upon completion of the program, completers are honored in a modest ceremony with the families of the completers present. The criminal judges and department administrators also attend the graduation proceedings. The completers and their families are given the opportunity to speak at the podium, and cake is served in celebration.

Structured activities for the clients of the Therapeutic Community include daily recreation, Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous, Bible study, spirituality, relapse prevention, men's mental health, women's mental health, chemical

dependency, women's empowerment, powerlessness and unmanageability, and fearless personal inventory (FPI).

Prior to graduation from the TC, clients attend an orientation program for one week that is held at the Residential Center. This orientation program is continued for another week upon being transferred to the Residential Center after graduation.

A Licensed Clinical Marriage/Family therapist aids the clients in addressing their family problems. These problems include past and present difficulties with family members, which may be related to a client's drug or alcohol use and abuse, as well as involvement in criminal activity. Clients recognize TC staff as part of the community who serve as role models in delivering the program.

Residential Program

The Johnson County Department of Corrections Residential Center accepts other residential clients in addition to the TC clients. The Center is a separate open-ended program that requires clients to progress through the program and develop an acceptable release plan. The release plan includes a place of residence, employment, and a support structure. While the standard stay is about four months, it is not unusual for clients to stay longer. In any event, clients will be held until an adequate release plan is in place. If the court releases a client from supervision, the client may stay for less than 60 days.

The following description is from the Johnson County Department of Corrections Annual Comprehensive Plan:

The purpose of the Residential Center is to provide a structured, supervised living situation for criminal offenders for a minimum of ninety days as an alternative to incarceration. During the first two weeks at the Residential Center, all offenders are enrolled full-time in an in-house orientation program. During the orientation period, offenders are subject to a physical examination, substance

abuse evaluation, and a psycho-social mental health evaluation. All clients complete Life Skills classes, Introduction to Cognitive Thinking, and pre-employment training. Upon completion of the Orientation Program, offenders are permitted to leave the facility to go to work at approved employment locations in the community.

The Residential Center provides numerous on-site resources to meet the criminogenic needs of the population served: Resource Developers are employed by the department to assist offenders with employment placements; contract substance abuse counseling services are provided on-site; Johnson County Mental Health provides mental health services; contract medical services are provided on-site; the Step-Up program offers clients the opportunity to obtain a high school diploma in lieu of a G.E.D.; and a variety of other correctional services are provided to meet the needs of each offender. Each of these services is provided to assist offenders in reintegration into the community as contributing and law-abiding citizens.

The timely discharge of each resident is contingent upon his/her ability to follow the rules of the program, meet his/her financial obligations, and address immediate counseling needs. Discharge is also largely dependent upon the availability of permanent housing and full-time employment for the client. A release plan is prepared to ensure that the residential plan, treatment plan, and employment situation are conducive to the offender's successful reintegration into the community.

Identification of Relevant Costs and Benefits

Cost-Benefit Analysis requires that all program costs must be identified and determined, including both explicit and implicit costs. From an economic perspective, all costs of all resources used in the provision of the program's services must be included. For this project, the economic (opportunity) cost concept, central to cost/benefit analysis, is operationalized by using the Drug Abuse Treatment Cost Analysis Program (DATCAP) survey. Program comparisons, either over time or with other programs, require standardization, which is facilitated by using opportunity costs, rather than only accounting costs. The basic idea is that the cost of all resources needed to insure the continued supply of a good or service must be accounted for. If a good or service is purchased in the market, the market price is the appropriate explicit cost. The opportunity costs of self-owned or self-employed resources must also be included. Conceptually,

opportunity cost of a resource is the amount equal to what the resource could receive in its next best alternative use.

The administration of the DATCAP survey followed the recommended procedures provided in the DATCAP manual. This was a collaborative effort involving a project team from Docking Institute and various members of the JCTC program. The DATCAP materials were sent to the JCTC accountant, in advance, to provide adequate time to review the materials. Conference calls were conducted between the JCTC accountant and members of the Docking Institute team, including the project economist. The JCTC accountant provided important guidance about the type and source of information appropriate for collection. A site visit to tour the treatment program facilities was conducted by the Docking Institute team. At a later date, a Docking Institute research associate visited the JCTC offices for a work session with the JCTC accountant. The purpose of the site visit was to ensure that important elements associated with the operation of the treatment program were not overlooked. The JCTC accountant entered the data into a spreadsheet conforming to the DATCAP cost categories and submitted this information. The Docking Institute research associate finalized the data collection for DATCAP.

DATCAP has a number of cost categories to encompass a wide range of costs associated with many treatment programs. The appropriate specific cost differs from program to program and needs to be considered and specified for each specific program being evaluated. Table 1 (page 14) presents the various costs for the JCTC program. While cost categories are the same as the categories in the DATCAP survey, the specific cost items that were determined to be appropriate for the JCTC program are identified in the table. The bold letters including a numeral in the first column, directly correlate to the DATCAP categories. Other numeric values in that column are the JCTC account numbers for cost items relevant to this program. Since the JCTC

Program involved two components—Therapeutic Community (TC) and Residential components, a more detailed spreadsheet was required than that associated with the DATCAP spreadsheet. While the DATCAP cost categories were maintained, certain costs had to be allocated to each component of the JCTC Program. It was believed that the JCTC spreadsheet should reflect these cost allocations.

Various personnel costs related to the TC were specifically available and are provided under the column labeled TC Center. The TC Center is located in Building One and the Residential component is located in Buildings Two and Three. Since residential Buildings Two and Three also housed people who were not associated with the TC program, personnel costs had to be allocated. Discussion of the method of allocation is provided below, because it provides additional data and insight into the nature of the program.

The allocation of costs for Buildings Two and Three should include costs associated with TC clients who were a part of the total number of residents. In FY04, all 168 beds in Buildings Two and Three were occupied and there was a waiting list for persons to be accepted into these residential buildings. The total number of bed-days (168), multiplied by the number of days in a year (365), represents 61,320 possible bed-days. Total client days actually spent in TC and Residential (Buildings Two and Three) were tabulated for each individual in the JCTC program in FY04. The total number of bed-days actually used by all clients in the TC program was 7,173 and the total number of bed-days in Buildings Two and Three for clients who completed TC in Building One were determined to be 5,066. Based on the fact that Buildings Two and Three had a total of 61,320 bed days for all programs served, the percent of all bed-days in FY04 for Buildings Two and Three associated with TC program clients was $5066 / 61,320 = 8.26\%$. It is assumed that all residents have equal access/use of services provided by the personnel in the

buildings, so an 8.26% allocation of costs of these services to the TC program appears appropriate.

All of the various cost items for Total Personnel Cost—wages, total cost for employee benefits, and total overtime cost were explicit costs provided by the accounting department. The volunteer labor services category, however, required an opportunity cost calculation discussed below.

Table 1: JCTC Program Costs FY04

Account	Description	TC Center	Total for Residential	8.26% Allocation of Residential to TC	Total
C1.	Total Personnel Cost - Wages				
500020	Full-time Salaries	419,619.65	2,463,106.61	203,452.61	623,072.26
500030	Part-time Salaries	17,996.04	487,642.54	40,279.27	58,275.31
500050	Shift Differential	1,039.04	7,401.60	611.37	1,650.41
500060	Holiday Worked Wages	8,548.01	38,549.25	3,184.17	11,732.18
500070	Retro-raise	99.97	463.41	38.28	138.25
500260	Other Special Pay Wages	0.00	400.00	33.04	33.04
500310	Vacation	25,355.50	135,403.36	11,184.32	36,539.82
500320	Sick	24,266.19	76,547.74	6,322.84	30,589.03
500330	Holiday	17,827.86	101,473.03	8,381.67	26,209.53
500340	Floating Holiday	4,287.13	32,658.22	2,697.57	6,984.70
500350	Other Non-worked Wages	648.88	7,168.90	592.15	1,241.03
	Total C1	519,688.27	3,350,814.66	276,777.29	796,465.56
C3.	Total Cost for Employee Benefits				
500410	Workers Compensation	9,049.59	65,548.64	5,414.32	14,463.91
500420	Life Insurance	368.12	2,200.59	181.77	549.89
500430	Health Insurance	50,510.98	451,173.77	37,266.95	87,777.93
500440	Vision Insurance	887.48	6,498.45	536.77	1,424.25
500450	Unemployment Insurance	1,091.41	8,452.44	698.17	1,789.58
500460	FICA Employer Match	40,544.23	261,745.97	21,620.22	62,164.45
500470	KPERS	16,413.06	111,993.38	9,250.65	25,663.71
500500	Benefit Allowance	8,092.73	44,779.02	3,698.75	11,791.48
	Total C3	126,957.60	952,392.26	78,667.60	205,625.20
C4	Total Overtime Cost				
500040	Overtime Wages	1,217.22	226,208.21	18,684.80	19,902.02
C5	Total Other Personnel Cost	0	0	0	0
C6	Volunteer Labor Services	3,205.17	8547.13	8,547.13	11,752.30
<hr/>					
TOTAL PERSONNEL COSTS		\$651,068.26	\$4,537,962.26	\$382,676.8	\$1,033,745.08

Table 1. JCTC Program Costs (Cont.) FY04

		Total All Bldgs.	Cost Allocated to TC (Bldg.1)	Bldg 2 & 3 = Total - TC expenses	8.26% of Bldg 2 & 3 alloc. TC Clients	Total TC Expenses
D.	Contracted Services					
D1.	Laboratory Services					
520115	Laboratory Services	57,196.80	8,865.50	48,331.30	\$3,992.17	\$12,857.67
D2.	Repairs and Maintenance					
520015	Inspection Services	2,920.00	452.60	2,467.40	\$203.81	\$656.41
520125	Landscape, Lawn, Snow	1,613.00	250.02	1,362.99	\$112.58	\$362.60
520680	Building Repair	6,998.77	1,084.81	5,913.96	\$488.49	\$1,573.30
520690	Equipment & Furn Repair	7,630.05	1,182.66	6,447.39	\$532.55	\$1,715.21
520730	Vehicle Maintenance	24,068.65	3,730.64	20,338.01	\$1,679.92	\$5,410.56
520770	MA-Equipment	8,295.22	1,285.76	7,009.46	\$578.98	\$1,864.74
		51,525.69	7,986.48	43,539.21	\$3,596.34	\$11,582.82
D4.	Housekeeping Services					
520035	Laundry Rug Uniform	9,274.92	1,437.61	7,837.31	\$647.36	\$2,084.97
520045	Janitorial Services	990.00	153.45	836.55	\$69.10	\$222.55
		10,264.92	1,591.06	8,673.86	\$716.46	\$2,307.52
D6.	Pest Control Services					
520005	Pest Control	4,599.50	712.92	3,886.58	\$321.03	\$1,033.95
D7.	Transportation Services					
510240	Transportation Contract	50,703.80	7,859.09	42,844.71	\$3,538.97	\$11,398.06
D11.	Other Contracted Services					
510120	Communications	11,444.11	1,773.84	9,670.27	\$798.76	\$2,572.60
510305	Advertising	60.00	9.30	50.70	\$4.19	\$13.49
510310	Advertising for Recruitment	208.80	32.36	176.44	\$14.57	\$46.94
510400	Employee Bonding	37.50	5.81	31.69	\$2.62	\$8.43
510580	Memberships/Dues	1,401.25	217.19	1,184.06	\$97.80	\$315.00
510830	Contractual Medical Services	53,429.76	8,281.61	45,148.15	\$3,729.24	\$12,010.85
510840	Medical Services	1,599.00	247.85	1,351.16	\$111.61	\$359.45
520065	Courier or Delivery	18.50	2.87	15.63	\$1.29	\$4.16
520105	Investigative Services	245.00	37.98	207.03	\$17.10	\$55.08
520245	Recreational Services	209.36	32.45	176.91	\$14.61	\$47.06
520255	Food Services	288,958.27	44,788.53	244,169.74	\$20,168.42	\$64,956.95
520275	Contractual Services - Uncls Reimbursements to Other	16,572.91	2,568.80	14,004.11	\$1,156.74	\$3,725.54
520400	Funds	684,196.00	106,050.38	578,145.62	\$47,754.83	\$153,805.21
520530	Facilities Rental	56,944.49	8,826.40	48,118.09	\$3,974.55	\$12,800.95
520875	Kansas Sales Tax Expense	21.65	3.36	18.29	\$1.51	\$4.87
		1,115,346.60	172,878.72	942,467.88	\$77,847.85	\$250,726.57

Table 1. JCTC Program Costs (Cont.) FY04

		Total All Bldgs.	Cost Allocated to TC (Bldg.1)	Bldg 2 & 3 = Total - TC expenses	8.26% of Bldg 2 & 3 alloc. TC Clients	Total TC Expenses
F1.	Equipment					
520540	Equipment & Furn Rental	1,880.74	291.51	1,589.23	131.27	422.78
520570	Rental or Leasing	2,306.85	357.56	1,949.29	161.01	518.57
		4,187.59	644.89	3,542.70	292.63	937.52
F2.	Equipment Purchased					
530435	Lawn, Garden, Snow Furnishings & Office	1,661.86	257.59	1,404.27	115.99	373.58
530440	Equipment	4,513.75	699.63	3,814.12	315.05	1,014.68
530445	Appliances	2,459.95	381.29	2,078.66	171.70	552.99
530465	Safety Equipment	207.26	32.13	175.13	14.47	46.59
530485	Computer Hardware	4,152.69	643.67	3,509.02	289.85	933.51
530500	Audiovisual Equipment	512.17	79.39	432.78	35.75	115.13
530505	Communications Equipment	995.72	154.34	841.38	69.50	223.83
530510	Janitorial Equipment	2,770.20	429.38	2,340.82	193.35	622.73
600240	Office Equipment	10,010.00	1,551.55	8,458.45	698.67	2,250.22
		27,283.60	8,430.63	18,852.97	1,557.26	9,987.89
G1.	Supplies and Materials					
	a. Drugs and Pharmacy					
530120	Drugs	71,419.51	11,070.02	60,349.49	4,984.87	16,054.89
	b. Medical Supplies					
530125	General Medical Supplies	13,844.26	2,145.86	11,698.40	966.29	3,112.15
	c. Office Supplies					
530015	Office Supplies	28,360.13	4,381.64	23,978.49	1,980.62	6,362.26
530020	Paper & Pre-printed	6,117.02	945.08	5,171.94	427.20	1,372.28
		34,477.15	5,326.72	29,150.43	2,407.83	7,734.55
	d. Housekeeping Supplies					
530140	Laundry Supplies	13,901.27	2,154.70	11,746.57	970.27	3,124.96
530275	Janitorial Supplies	36,483.77	5,654.98	30,828.79	2,546.46	8,201.44
		50,385.04	7,809.68	42,575.36	3,516.72	11,326.41
	e. Linen and Bedding					
530080	Bedding, Linen	5,952.99	922.71	5,030.28	415.50	1,338.21
	j. Postage					
510140	Postage via US Postal	14.72	2.28	12.44	1.03	3.31
	k. Other Supplies					
530030	Personal Care	9,662.64	1,497.71	9,164.93	674.42	2,172.13
530040	Audiovisual Material	887.68	137.59	750.09	61.96	199.55
530070	Minor Art Works	450.24	69.79	380.45	31.43	101.21
530075	Uniforms, Clothing, Linen	2,960.76	458.92	2,501.84	206.65	665.57
530090	Unclassified	330.30	51.20	279.10	23.05	74.25

		Total All Bldgs.	Cost Allocated to TC (Bldg. 1)	Bldg. 2 & 3 = Total - TC expenses	8.26% of Bldg. 2 & 3 alloc. TC Clients	Total TC Expenses
530110	Food	19,185.61	2,973.77	16,211.84	1,339.10	4,312.87
530115	Kitchen & Food Service	2,031.79	314.93	1,716.86	141.81	456.74
	Ice & Snow Removal					
530135	Chemicals	951.20	147.44	803.76	66.39	213.83
530145	Chemicals - Unclassified	2,250.04	348.76	1,901.28	157.05	505.80
530160	Building - Improvements	1,425.90	221.01	1,204.89	99.52	320.54
530170	Building Materials	11,871.27	1,840.05	10,031.22	828.58	2,668.63
530175	Electrical Supplies	3,663.72	567.88	3,095.84	255.72	823.59
530180	Plumbing Supplies	888.26	137.68	750.58	62.00	199.68
530265	Tools	372.76	57.78	314.98	26.02	83.80
530270	Lawn Care Supplies	419.55	65.03	354.52	29.28	94.31
530280	Photographic Supplies	803.17	124.49	678.68	56.06	180.55
	Recreational & Craft					
530290	Supplies	1,125.38	174.43	950.95	78.55	252.98
530295	Computer Supplies	111.62	17.30	94.32	7.79	25.09
530300	Laboratory Supplies	32,855.56	5,092.61	27,762.95	2,293.22	7,385.83
530310	Safety Supplies	868.57	134.63	733.94	60.62	195.25
530315	Safety Awards/Incentives	35.00	5.43	29.58	2.44	7.87
530325	Operating Supplies	2,964.41	459.48	2,504.93	206.91	666.39
530330	Equipment & Motor Repairs	3,405.68	527.88	2,877.80	237.71	765.59
		99,521.11	15,425.77	84,095.34	6,946.27	22,372.05
H1.	Miscellaneous Resources/Costs					
	a. Electricity					
510010	Electricity	79,357.65	12,300.44	67,057.21	5,538.93	17,839.36
	b. Gas					
510020	Natural Gas/Propane	21,338.55	3,307.48	18,031.07	1,489.37	4,796.84
	d. Water and Sewer					
510040	Water	13,155.94	2,039.17	11,116.77	918.25	2,957.42
510050	Sewer	6,905.15	1,070.30	5,834.85	481.96	1,552.26
		20,061.09	3,109.47	16,951.62	1,400.20	4,509.67
	e. Garbage					
510060	Trash Hauling	11,304.45	1,752.19	9,552.26	789.02	2,541.21
	k. Telephone					
510110	Telephone	23,230.37	3,600.71	19,629.66	1,621.41	5,222.12
510115	Long Distance Telephone	3,367.58	521.97	2,845.61	235.05	757.02
		26,597.95	4,122.68	22,475.27	1,856.46	5,979.14
	l. Printing and Duplicating					
520075	Printing or Copying	5,098.87	790.32	4,308.55	355.89	1,146.21

		Total All Bldgs.	Cost Allocated to TC (Bldg. 1)	Bldg. 2 & 3 = Total - TC expenses	8.26% of Bldg. 2 & 3 alloc. TC Clients	Total TC Expenses
m. Transportation						
530345	Fuel	49,389.87	7,655.43	41,734.44	3,447.26	11,102.69
530350	Oils/Vehicle Fluids	28.59	4.43	24.16	2.00	6.43
530405	Vehicle Supplies & Access	706.76	109.55	597.21	49.33	158.88
		50,125.22	7,769.41	42,355.81	3,498.59	11,268.00
n. Publications, Subscriptions, Books						
530025	Books, Newspapers	5,184.24	803.56	4,380.68	361.84	1,165.40
				0.00	0.00	0.00
				0.00	0.00	0.00
o. Staff Training						
	CPE-Continuing					
500590	Professional Educ.	365.00	56.58	308.43	25.48	82.05
500600	Non-CPE/Fees	967.50	149.96	817.54	67.53	217.49
		1,332.50	206.54	1,125.96	93.00	299.54
p. Staff Travel						
510190	Commercial Travel	236.20	36.61	199.59	16.49	53.10
510200	Lodging Costs	1,183.92	183.51	1,000.41	82.63	266.14
510210	Meals & Tips	424.00	65.72	358.28	29.59	95.31
510220	Mileage Reimbursement	3,654.86	566.50	3,088.36	255.10	821.60
510230	Parking & Tolls	160.65	24.90	135.75	11.21	36.11
		5,659.63	877.24	4,782.39	395.03	1,272.27
E. Buildings						
		Total Sq. Footage: All Bldgs.	TC – Bldg. 1: Sq. Ft.	Bldg. 2 & 3 Sq. Ft.	8.26% of Bldg. 2 & 3 alloc. TC Clients	Total TC Sq Ft.
	Square Footage	44,384.00	7,641.00	36,743.00	3,035.0	1,0676.0
	Yearly Rental Value at \$9.00/sq.ft.		69,456.69		\$27,314.75	\$96,083.75
	Total Non-Payroll Expenses		\$356,168.37		\$154,194.27	\$509,674.95
	TOTAL FOR ALL COSTS: FY 04		\$1,086,768.87		\$536,871.09	\$1,543,420.03

Note: Cost categories and their letter designations in this table are consistent with DATCAP cost categories and labels.

A number of activities important to the JCTC Program were provided with volunteer labor. Even though there is no direct cost associated with the various activities, resources are utilized and an account must be made for the economic value of the resources utilized. Table 2 (page 20) summarizes various activities and labor inputs for both the TC and Residential components on a monthly basis. Labor time was not prorated to the TC program in Buildings Two and Three, because it is likely that the same number of volunteers would be used regardless of the client mix. To obtain the total number of hours of volunteer labor, the hours per activity were multiplied by the number of occurrences of that activity during a month. This total number of hours per month per activity was then multiplied by the number of volunteers involved in providing the activity.

The annual volunteer costs for the TC component are calculated by multiplying the number of hours of volunteer service in a month by 12 months and then by \$5.15, the federal minimum wage. Actual total volunteer hours per month were 187, multiplied by 12 equals 2,244 hours per year. At the federal minimum wage of \$5.15 per hour, the total value of volunteer labor is \$11,557. There were also special annual events that included volunteer activity: an outdoor concert, a Christmas program, and a picnic. Adding these labor resources resulted in a total of \$11,752.

These cost estimates may be underestimated for a number of reasons, because the total number of hours do not account for hours spent in preparation or administration of the activity. The minimum wage applied is probably not reflective of the opportunity costs for the people providing the services. No estimate of personnel fringe benefits was included for volunteer services.

Table 2: Volunteer Labor Services per Month

Activity	Hours per Activity	TC (Occur/Mo)	TC (Hrs/Mo)	Bldg. 2 and/or 3 (Occur/Mo)	Bldg. 2, 3 (Hrs./Mo)	Total (Hrs./Mo)	# of Volunteers /Activity	Total Volunteer Hours
<i>Drug-Related</i>								
Men's AA	1	8	8	24	24	32	1	32
Women's AA	1	4	4	12	12	16	1	16
Men's NA	1	2	2	1	1	3	2	6
Women's NA	1	1	1	1	1	2	2	4
Men's Cocaine Anon.	1	2	2	0	0	2	1	2
Women's Cocaine Anon.	1	2	2	0	0	2	1	2
Al Anon	1	1	1	0	0	1	1	1
12-Step	1	1	1	0	0	1	2	2
<i>Religious</i>								
Men's Bible Study	1	2	2	16	16	18	2	36
Women's Bible Study	1		0	16	16	16	1	16
Church Services	1	4	4	6	6	10	3	30
<i>Personal Improvement</i>								
Parenting for Men	1	4	4	4	4	8	1	8
Women's Grief & Loss	1.5		0	6	9	9	1	9
Men's Pathway to Hope	1		0	4	4	4	1	4
<i>Recreation</i>								
Women's Craft Class	1.5		0	1	1.5	1.5	2	3
Women's Story Group	1		0	4	4	4	1	4
<i>Other</i>								
Pets for Life	1	2	2	2	2	4	3	12
Totals			33	97	100.5	133.5	26	187

<i>Special Projects</i>								Yearly Totals
Picnic for all 3 bldgs	One person spent all night preparing a pig roast							15
Xmas Services	1.5						6	9
Outdoor Concert(all 3 bldg)	2						7	14
Total								38

Non-personnel and contracted services costs were available only for all buildings combined, including TC. It was necessary to allocate a portion of these costs to the TC program. Two approaches for allocation could be used. One approach is to allocate costs to the TC (Building One) on the basis of the percent of total square footage accounted for by that building. Table 3 provides information about building square footage.

Table 3: Building Usable Square Feet

Buildings	Square Feet	
Bldg One (TC)		7,651
Bldg Two (Res)	15,020	
Bldg Three (Res)	21,723	
Subtotal	36,743	7,641
	Total	44,384

The percentage of total square footage accounted for by Building One is 17.2% ($7,641 / 44,384 = 17.22\%$). Alternatively, the percentage of total beds associated with TC (Building One) relates to client usage. The percentage of beds in TC as a percent of all beds is 13.85% ($27 / 195 = 13.85\%$). It is likely that one approach is better for some costs, and the other approach better for other costs. The average of the two methods of allocation is 15.5% ($(13.85 + 17.22) / 2 = 15.5\%$) and was used to allocate the costs to TC (Building One).

The amount allocated to TC was subtracted from the total cost for each cost item to obtain the cost associated with Buildings Two and Three. Part of the costs associated with those buildings must be allocated to the TC program, because TC clients utilize those buildings. The 8.26% allocation based on TC client bed-day usage that was used to allocate personnel cost was adopted in the other cost categories as well.

The various cost categories listed under Contracted Services (D1 – D11) are self-explanatory. However, item 520400: Reimbursements to Other Funds deserves additional description. All central office administrative expenses are included in this account, including the following items:

1. County-wide Support	9. County Manager
2. Commissioners	10. Finance
3. Maintenance	11. Budget
4. Facilities Planning	12. Legal Department
5. Postal Services	13. County Treasurer
6. Records Management/Archives	14. Risk Management
7. Human Resources	15. Internal Audit
8. Information Technology	16. Other

Cost category E: Buildings (Table 1 page 14) is concerned with an estimate of the value of the building and facilities resources utilized by the program. From an economic perspective the question is what would be the annual rent that the building could have received if it were to be used in the next best alternative use? Since this information may not be known for a specific building, leases/rents on comparable facilities are often used. Rents for building space in the Johnson County area are reported in the appraiser's reports for both office and industrial space. The "2005 Mass Appraisal Market Information Office Buildings and Related Structures," report provides a rental range for Class C facilities of \$9.00 to \$19.00 with a predominant value of \$14.00. This class of structure is for a lesser quality new building or older renovated building in average condition with minimum functional deterioration and obsolescence. These buildings are mostly in non-prime locations, moderate to average occupancy levels, moderate to average rental rates and normally well-managed buildings.

In addition to the consideration of comparable facilities, new building construction could be considered to establish potential replacement values if the current buildings were no longer

available. A similar building project has been undertaken in Johnson County and useful data were available. The total project construction cost was given as \$11,754,000, with total square footage of 79,911 for the Housing, Programs, and Maintenance components. Bonds of varying maturity yields over a 20-year period were issued to finance the construction project. Over the 20-year period, accounting for interest charges, the cost per square foot for residential space was calculated to be approximately \$10.90 per square foot per year.

While new construction cost does not give a true measure of the value of the current facility space in its next best alternative use (opportunity cost), the opportunity cost probably lies between the low end of the County Appraiser range for Class C structures of \$9.00 per square foot and the predominant value of \$14.00 per square foot. Since the current JCTC facilities are not equivalent in quality to the new facilities, the lower estimate of \$9.00 per square foot found by the County Appraiser was used in the analysis to value the space used in the TC program that was in place in FY04.

The square footage in the TC (Building One) was combined with square footage used by TC clients in Buildings Two and Three to determine total square footage applicable to the program. As seen in the cost spreadsheet the total square footage was 10,676. The total annual cost associated with building space was \$96,083.75 (10,676 x \$9.00).

The totals for the non-personnel costs are presented at the bottom of the table. The totals for all costs for the TC and Residential are also provided at the bottom of the table. Table 1 specifies, **the total cost for the entire program is \$1,543,420.03 for FY04.**

Cost Calculations and Comparisons

During FY04, there were a total of 12,437 client days spent in both the TC and Residential facilities. Dividing this number by 365 results in an average daily census of 34 clients. Two comparison costs calculations are available for other programs that used DATCAP surveys: Weekly economic cost per client is calculated by dividing total annual economic cost by average daily census and then dividing the quotient by the average number of weeks in a year. For the JCTC program this is \$870.63 ($(\$1,543,420.03 / 34) / 52.14$) Economic cost per treatment episode is equal to weekly economic cost per client multiplied by average length of stay in weeks. For the JCTC Program this is \$37,724.45, ($\$870.63 \times 43.33 = \$37,724.45$) based on a six month TC component and a four month average residential component.

Roebuck, French, and McLellan (2003) report these two cost estimates based on DATCAP data from five therapeutic community programs. In these programs, the average length of stay in weeks was 33 (SD = 22), and with an average daily census of 152 (SD = 265), where the standard deviation is in parenthesis. One large, multi-location, program biased the average value for the daily census. The actual daily census values for each program were 625, 53, 8, 13, and 62. The average weekly economic cost per client was \$587 (SD = \$194) and the average economic cost per treatment episode was \$18,802 (SD = \$12,409).

Another comparison across the evaluations of other programs, presented by Roebuck, et al. 2003, concerns the percentage distribution of costs across the various cost categories presented in DATCAP. Table 4 (page 25) presents the cost distribution for the JCTC program for each component of the program (Therapeutic Community and Residential), as well as the entire JCTC program. The average percentages for five other Therapeutic Communities are also presented in the study previously cited.

As observed in Table 4, the percentage cost distribution for each component of the JCTC program (Therapeutic Community and Residential) were similar percentages, with the notable difference being the labor cost category.

Table 4: Percentage Distribution of Program Costs

Cost Category	JCTC Program	JCTC-TC	JCTC-Res	Other Therapeutic Communities* (n = 5)	Other Adult Residential* (n = 18)
Labor	67.338	67.23	67.53	47.58	55.46
Supplies and Materials	3.97	3.93	4.04	11.81	10.34
Buildings and Facilities	6.19	6.39	5.80	18.20	12.64
Contracted Services	18.58	18.39	18.92	13.31	4.23
Major Equipment	0.68	0.84	0.39	0.29	0.10
Miscellaneous	3.26	3.22	3.32	8.50	16.42
Total	100	100	100	100	100

* Source: Roebuck, French, and McLellan (2003)

Meaningful comparisons of program costs are difficult based on the limited reported number of other programs that may be viewed as similar to the JCTC program. Few reported programs have average length of stay and average daily census comparable to the JCTC program. Given the nature of the clients served by the JCTC program, the larger percentage associated with the labor category in the JCTC program compared to other programs may be expected. Also, the client profile served by the JCTC program is likely to require more supervision and therefore greater personnel cost compared to other TC programs. Comparisons to programs that are similar in nature will become increasingly possible as more cost evaluations utilizing the DATCAP become available.

Cost-benefit analysis does not provide information to determine how to make an existing

program more efficient or to determine whether the existing program is more efficient than an alternative program. The purpose of cost-benefit analysis is to determine if a given program provides more economic benefits to society than the cost to society to provide that program. The next section of this report is concerned with the identification and estimation of program benefits.

Identification and Estimation of Relevant Benefits

Similar to the cost side, all benefits of a program conceptually should be comprehensively identified and valued, ideally valued in both the present and the future. To quantify and properly assess the benefits of drug intervention programs that facilitate wise policy decisions in the allocation of scarce public resources, requires data that is specifically collected with that purpose in mind. The conventional approach for estimating the economic benefits of a drug treatment program with multiple outcomes is to measure mean differences in pre- and post-treatment patient outcome characteristics. Differences in outcomes (e.g., reduced consumption of health care services, reduction in crime, prison costs avoided, changes in labor force participation and attachment to the labor force, etc.) for a specified time interval (e.g., 12 months) are multiplied by monetized conversion factors to yield a dollar amount of economic impact.

Rajkumar and French, (1997) estimate that for the crime of robbery, tangible crime victim costs (i.e., total value of medical costs, lost wages, property damage, and the risk-of-homicide cost) equal \$2,027, criminal justice system costs (i.e., police protection costs, costs of running the criminal justice system, private legal costs, and correctional costs) equal \$3,377, and crime-career losses (i.e., lost productivity of individuals who engage in criminal activities rather than pursuing a legal career) equal \$1,059. The sum of these tangible costs is \$6,463. Added to

tangible costs are intangible costs, which, in general, represent pain, suffering, and fear. Intangible costs are difficult to value, but are estimated primarily using jury-compensation data corrected for litigation costs. Rajkumar and French (1997) estimate the intangible costs of robbery at \$15,427. In 1992 dollars, total tangible and intangible costs of robbery are estimated to be \$21,890. Therefore, if a client reports committing two robberies per year prior to a drug treatment program and none after treatment, the economic impact of crime reduction is a post-treatment 12-month benefit of \$43,780 for that one individual.

Intuitively, benefits of drug treatment extend beyond a one-year horizon, but given the nature of drug usage with drug-free periods replaced by relapses, extrapolation of benefits into the future becomes a more difficult empirical task.

Data Limitations

This cost-benefit project does not have data available to enable pre- and post-mean differences to be measured, and economic benefits attributed to the JCTC program could not be estimated from in-house data. One exception, however, is the benefit of avoided prison costs for which JCTC data was available. As a result, a survey was developed that attempted to fill this void of information. A self-administered survey was designed to collect data retrospectively from JCTC clients who completed the program. The content of this survey is consistent with the data gathered by numerous drug treatment evaluation studies (See Attachment A). It was mailed to eligible clients from the previous five years. Unfortunately, several difficulties arose from this method.

Since CBA attempts to measure the benefits to society that can be attributed to a program, respondents who did not complete the program were removed from the sample for

purposes of benefits estimation. Also removed from the sample were those who were returned to the correctional system. Persons removed from functioning in society, cannot generate benefits for CBA. Finally, those respondents without mailing information needed to be removed from the sample. Given those reductions, an original sample of 185 was reduced to 121.

The initial mailing resulted in about 50 of the surveys being undeliverable, resulting in a valid sample of 71. Thirteen surveys were completed and returned. In an attempt to increase the response rate, follow-up telephone contacts were attempted among the remaining persons, but only 44 had telephone numbers on file. The telephone contacts with the remaining 44 persons were unsuccessful, with many resulting in wrong or disconnected numbers. For many of the calls that were completed, respondents disclosed that the potential survey participant was a former resident who either moved away, or had lived there a short time. The few persons who were actually reached during the telephone attempts refused to participate in the survey. In short, the entire surveying process resulted in only 13 completed questionnaires, with no additional completions coming as a result of the telephone contacts. These returned questionnaires produced a sample size that has no statistical value.

Data Collection Recommendation for Future Benefit Cost Studies

Given the nature of the population surveyed, this retrospective survey methodology alone is not well-suited to the collection of valid and reliable data. This population is generally mobile and disconnected phone numbers and undeliverable mail were prevalent. Rather than attempting to track down previous completers years after their participation in the project to determine the benefits of the program, this data should be collected during mandated intake and follow-up sessions (six months, one year, etc.) coordinated by the program. This is a common method used

by other drug-treatment programs to assess pre- and post-program differences in participants' work and family status, substance use and criminal incident data, medical and mental health status, and benefit measures. Future efforts to estimate benefits should utilize this methodology, or suffer the same fate as the current project—very little data from which to estimate benefits.

A minimal approach to generate data that will drive a CBA of a drug treatment program is the use of the Drug Abuse Treatment Costs Analysis Program (DATCAP) and the Addiction Severity Index (ASI) instruments. Although the ASI is primarily used for clinical purposes, its administration with some augmentation on a pre- or post- basis can provide information on outcome measures such that some economic benefits of drug treatment programs can be estimated. Ideally, however, is the use of an instrument that is specifically designed to gather data to facilitate the benefit estimation side of Cost-Benefit Analysis.

Benefit Estimation Approach and Limitations

In the absence of specific in-house data to estimate most benefits of the JCTC program, monetary conversion factors and data from other drug treatment studies were adapted and applied to generate benefit estimates for the JCTC program. In an attempt to minimize comparability limitations, the data and monetary conversion factors used to provide the estimates reported below come from drug treatment studies that, when available, are similar to the JCTC program in that they are of similar length and contain both an in-house therapeutic component and residential component. However, beyond those general commonalities there are considerable differences among programs with respect to histories of drug abuse clients, how they enter the program (self-referral or justice system referral), specific treatment modality (residential or outpatient with or without methadone), philosophy, and regimen. Therefore, the estimated

economic benefits attributed to the JCTC program are subject to greater error than if generated from JCTC data and statistically significant differences in pre- or post differences found in a study with similar attributes as the JCTC program may or may not be statistically significant for the JCTC program. Many of the published drug treatment studies do not have a control comparison group, thus the assumption is made that any changes in behavior are due to the treatment program. Other data limitations of published studies include a small sample size, reliance on self-reported data, and low follow-up response rates. At a more fundamental level is the absence of homogeneous or consistent methodology for incorporating economic theory and empirical methods with process and clinical outcome evaluations that facilitate direct comparability across different studies.

Client Sample Used to Estimate Benefits

Johnson County Therapeutic Community provided the Docking Institute with a list of the clients who participated in the program going back to its inception. However, only those people (77 total) who were identified as having spent time in the JCTC facility during FY04 (the time period for the analysis) were included.

In terms of the time spent in JCTC during FY04, these 77 clients fell into one of the following categories: a. started the therapeutic community program portion (TC) in fiscal 2003, but completed the residential portion in fiscal 2004; b. partially completed or completed both TC and residential in fiscal 2004; c. completed TC in fiscal 2004 but did not complete residential; d. started TC in fiscal 2004 but continued into fiscal 2005 with the remainder of TC and/or residential.

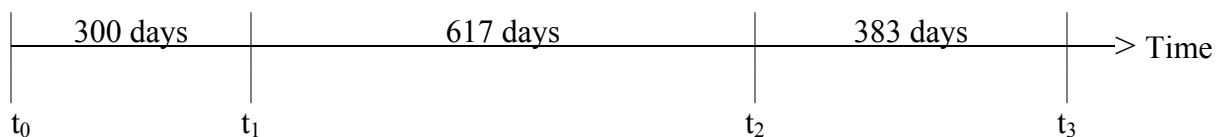
During FY04, there were a total of 38 clients who completed the entire program, which included both the therapeutic (TC) and residential components. These 38 clients were the basis for estimating most benefits but not all benefits.

Estimation of Economic Benefits Derived from JCTC Program

Reduction in Prison Costs

Since clients in the JCTC program had the choice, to serve their sentence or participate in the JCTC program, there are three distinct intervals in which prison costs are avoided and benefits accrue to society. These intervals are depicted graphically in Figure 1.

Figure 1: Intervals in Which Prison Costs Are Avoided By JCTC Clients



t_0 = Entry into JCTC

t_1 = Completion of JCTC

t_2 = Completion of average sentences

t_3 = Additional days JCTC completers avoided re-offending compared to no treatment drug offenders

The first interval in Figure 1 ($t_0 - t_1$) is the time or days spent in the JCTC treatment program (average of 300 days), both TC (180 days) and residential (120 days), rather than in prison. For FY04, the total number of actual days spent in TC and residential for all 77 clients who were in treatment for all or part of FY04 was 12,437 days. The estimated annual operating,

capital and administrative costs per inmate under state authority, per day in Kansas in 2004 was \$62.04 (Source: 2004 KDOC budget). **This resulted in \$771,591 (12,437 x \$62.04) of avoided prison costs.** Other estimates reported having higher Kansas daily per capita prisoner costs in 2004 dollars at \$72.08 and \$99.87. (Stephan 2001, Garrison 2003). At \$99.87 per day, this would result in \$1,242,083 of avoided prison costs. However, when multiple values of monetizing factors are available, a conservative approach is adopted and thus most estimates reported below should be viewed as lower bound estimates.

The second interval of avoided prison costs shown in Figure 1 ($t_1 - t_2$) is the time or days after completion of JCTC residency until what would have been a client's release date from prison. Avoided prison costs can be estimated by using average time served per each year sentenced, average recidivism rate, and average time until recidivism.

JCTC provided Docking Institute researchers with the client's originating sentences which would have been served had clients not agreed to enter treatment. The range of sentence lengths for the 77 clients in JCTC during at least part of FY04 is six months to 206 months, with an average sentence of 27.4 months or 832 days. The estimated average time served for drug related sentences is 85% of the imposed sentence minus 90 days for jail time served prior to sentencing or approximately 617 days (JCTC statistician estimate). The recidivism rate is determined by examining the outcomes of all JCTC completers (i.e., completed both TC and residential) from 7/15/1999 to 8/11/2004. Of this total of 121 clients, ten clients were sent back to prison, there are six outstanding warrants, and four pending cases. Assuming that all 20 recidivate, the recidivism rate is 18%. This is a conservative assumption in that if some warrants or pending cases were dropped or resulted in additional treatment and/or probation, this would

have the effect of increasing avoided prison costs. Not included in the recidivism rate were eight clients with new offenses, but who completed the program or remain on probation.

The average number of days until recidivism is 679. This is considerably greater than what is reported in the literature. For example, Kim, et al., (1995) reported the mean time until first reincarceration for after-care completers was 352 days compared to 243 days for a control group. Applying these historical values to the 38 JCTC completers in FY04, seven clients are predicted to recidivate in an average of 679 days after completing JCTC. Since the number of days predicted to recidivate (679) is greater than the number of days that these seven clients would have served until being released from prison, if they had not entered JCTC (617 days on average), the avoided prison cost for this group is calculated the same for this group as for the completers. Had the seven clients recidivated in fewer than 617 days, adjustments in the number of avoided prison days would be required.

The estimated avoided prison costs, for all clients are calculated by subtracting the total number of days to complete the JCTC treatment program (approximately 300 days) from the days of average sentence served (617 days). **For each of these 38 clients, after JCTC, there are 317 days of avoided prison costs that has a total estimated value of \$747,334 (317 x 38 x \$62.04).**

Conceptually, the third interval of avoided prison costs ($t_2 - t_3$) is the difference in the release date from prison had an individual not chosen JCTC treatment until another drug conviction or incarceration, compared to what would have been the release date from prison when JCTC treatment is chosen until another drug conviction or incarceration. In other words is there a difference in completers compared to drug abusers who did not participate in a TC program. Assuming that drug treatment programs have some degree of success, (i.e. some clients

are completely rehabilitated, drug-free, and therefore drug related criminal activity is eliminated) and prison costs are further decreased. Absent a control group experimental methodology estimation of this component of reduced prison costs is difficult.

A study by McCollister, French, et al. (2004) examined one-year and five-year outcomes of an in-prison treatment program followed by an optional residential component for prisoners with less than one year of sentence remaining. There were three inmate groups: participants who completed both the treatment and residency components (n=105), participants who completed only the in prison treatment program (n=226), and a control group with random assignment (n=235). The five-year follow-up found that the control group had an average 626 days of reincarceration, compared to 343 days of reincarceration for the group of participants who completed both the treatment and residency components. Consequently, a difference of 383 days per client of prison costs are avoided. If the JCTC program experienced a similar outcome at five years, this would result in 11,873 total additional days prison costs avoided for the 31 JCTC completers (11,873 x (383 x 31)) **valued at \$736,601** (11,873 x \$62.04). This monetized value of avoided costs for this interval would likely be more reliable if the data were generated from JCTC clients and a control group.

The total avoided prison costs from all three intervals is \$2,255,526. Since the benefits due to avoided prison costs extend into the future, these dollar amounts must be discounted back to FY04 for comparison to FY04 costs. Conceptually, the appropriate discount rate should reflect a social rate of time preference, but from this perspective there is little practical guidance to determine its numerical value. From an opportunity cost perspective, public investment (e.g., substance abuse programs) displaces private investment, thus the opportunity cost of public investment is the rate of return earned if those resources were used in their best

private investment alternative. Therefore, the discount rate should approximate real future private productivity proxied by real future growth rate of U. S. Gross Domestic Product (GDP). Since the discount period is relatively short, a 4% discount rate reflecting historic GDP growth is used. Any error in selecting a 4% discount rate would likely be associated with selecting a rate that is too high and which has the effect of reducing the present value of avoided prison costs. However, quantitatively, the difference will be minimal given the rather short discount period. Assuming that the first two intervals of avoided costs are evenly distributed over the first two years and that interval three avoided costs are also evenly distributed over the remaining three years, and that each year's benefits accrue at the end of their respective year, the discounted or present value of total avoided prison costs is \$2,062,260 ($PV = (\$771,591 / 1.04) + (\$747,334 / 1.08) + (\$245,534 / 1.12) + (\$245,534 / 1.17) + (\$245,534 / 1.22)$)

Reduction in Crime Costs

The U. S. Department of Justice reported (Arrestee Drug Monitoring Program, 2001) that 65% of those arrested were recent drug users. The Office on National Drug Control Policy reported that in 1998 drug offenders represented 59% of all inmates in federal prisons and 21% of all inmates in state prisons. Approximately 40% of crack and cocaine users reported engaging in criminal activity to obtain money for drug purchases (Boyum and Kleiman 1995). Additionally, 50% to 80% of those arrested for non-drug crimes tested positive for drugs at the time of their arrest (Freeman, 1996). Virtually all studies conclude that drug treatment programs reduce crime costs. However the amount of the reduction varies considerably. A significant part of that variability is how crime costs are defined and measured. Classifications of crime costs typically considered include:

- Victim costs These costs include tangible costs associated with medical costs, property damage costs, reduced income, lost productivity, and risk-of-homicide costs. Intangible costs are costs associated with pain and suffering by crime victims.
- Costs of crime protection and enforcement Included costs are police protection, criminal justice system costs, costs of drug trafficking, private legal costs, and correctional costs.
- Crime career costs These costs include lost productivity of individuals who engage in criminal activities rather than pursuing legal activities.
- Other external costs These costs include averting behavior costs (e.g., moving out of a crime ridden neighborhood), protective behavior costs (e.g., alarm systems, weapons, etc.), and the psychological cost of fear of becoming a crime victim.

Again, there is limited uniformity in costs included and methodology used in estimating these costs in published studies.

Flynn, et.al. (1999) estimated the benefits of reductions in criminal activity for one year. Estimates were based upon 300 clients in a long-term residential program and calculated by the post-treatment reductions in self-reported criminal acts multiplied by the tangible costs of crime estimated by Rajikumar and French (1997). Assuming that follow-up non-responders generated zero economic benefits, a conservative estimate valued the average 12-month per client benefit of avoided criminal activity from drug treatment intervention at \$24,302. French, Salome, et al. (2000) estimated the per client benefit at \$21,131. Both studies were conducted over a 12 month period and in 2001 dollars. Utilizing the lower of the two estimates, the total estimated crime reduction of JCTC program completers in FY04 is \$802,978 ($\$21,131 \times 38$) in 2001 dollars. Incarceration costs are included in these estimates and hence double counting is involved. Incarceration costs are typically high for aggravated assault crimes, but quite low for gambling and first time drug law violations. Using Rajikumar and French (1997, Table 1) criminal justice costs, which include only incarceration costs, are 47% of total tangible costs for eight crime

categories. Reducing the French, Salome, et al. (2000) estimated per client benefit of \$21,131 by 47% and converting to 2004 dollars results in an adjusted estimated per client 12-month benefit of \$11,983. **The total estimated crime reduction benefit of JCTC program completers in FY04 is \$455,351 (\$11,983 X 38).**

Increased Employment Earnings

Several studies that empirically investigate the relationship between drug use and various aspects of labor market participation have found that being a chronic drug user reduces the likelihood of employment, increases absenteeism from work, reduces productivity while at work, and increases the duration of unemployment. Buchmueller and Zuvekas (1998) suggest that earlier studies failed to adequately discriminate between moderate drug consumption and heavy drug consumption or abuse/addiction. When separating moderate drug users from more problematic users, they found substantial negative impacts of problematic drug use, on the order of 12 to 13 percent lower earnings. However, Zuvekas, et. al (2005) found a negative association between having drug problems and employment (of three percentage points in the unemployment rate among males), but no effects of lifetime drug problems on annual earnings conditional on employment.

Studies that estimate the change in 12-month employment income prior to and after treatment intervention per client vary from \$824 to \$5,014. The average employment income change per client across all treatment interventions reported by McCollister and French (2003) is \$1,520. **Utilizing the average employment change for the 38 FY04 JCTC completers results in estimated benefit of \$57,760.**

Reduced Health Care Costs

It is commonly recognized that many chronic drug users consume a greater amount of health care resources compared to the general public, most likely at taxpayer expense. However, there may be some chronic drug users that ignore health considerations, and after drug treatment actually consume more health care resources. Thus, it is an empirical question as to benefits derived from a drug treatment program in terms of the amount of reduced health care costs. Some of the maladies that are associated with drug abuse include hepatitis B, HIV/AIDS, hypertension, bacterial pneumonia, sexually transmitted diseases, and tuberculosis (French, et. al., 1996). Since most of these conditions are communicable, society has an even greater stake than greater use of health care resources by a chronic drug user.

The specific health care services typically considered and estimated pre- to post- treatment include:

- Number of days in a medical hospital
- Number of days in a psychiatric hospital
- Number of emergency room visits
- Number of days experiencing medical problems

McCollister and French (2003) reviewed 11 drug treatment benefit studies where interventions varied from brief physician interventions to long-term residential programs. The average benefit of health care services avoided across all studies that estimated that category was a 12-month per client benefit of \$1,939 in 2001 dollars. In 2004 dollars adjusted by the medical care component of the Consumer Price Index (CPI) for all urban consumers results in a benefit of \$2,230. **The total economic benefit for the 38 JCTC completers is \$84,740.** Again, data limitations include self-reported data, and not all health care benefit categories are included. Additionally, pre-treatment health care usage is usually measured for the period just prior to

treatment, for example the previous month, and then extrapolated on an annual basis. It is likely the health care expenditures are above average just prior to treatment.

All estimated benefits and totals are summarized in Table 4. **The present value of estimated benefits for the JCTC program in FY04 is \$2,637,117.**

Table 5: Estimated Benefits of FY04 JCTC Clients

Benefit Category	Estimated Benefits per Client	Number of Clients	Total Benefits	Present Value
	Per Client			
Avoided Prison Costs				
Interval 1 Days	\$9,635	77	\$771,591	\$741,914
Interval 2 Days	\$18,183	38	\$747,334	\$690,952
Interval 3 Days	\$20,303	31	\$736,601	\$629,394
Avoided Crime Costs	\$11,983	38	\$455,351	\$437,838
Employment	\$1,520	38	\$57,760	\$55,538
Health Costs Avoided	\$2,230	38	\$84,740	\$81,481
Total	\$63,854		\$2,853,377	\$2,637,117

Notes: Interval Days 1= number of days from entry to completion of TC and residency
Interval Days 2= number of days from completion of TC and residency to end of average sentence
Interval 3 Days= number of days JCTC completers avoid reincarceration compared to no treatment

Other Benefits

There are other generally recognized benefits in addition to those estimated in Table 4 (page 25) that will likely flow from successful drug treatment programs. However, most of these additional benefits are difficult and/or cost prohibitive to measure and develop monetizing factors. Additionally, some benefits are intertwined and if estimated, may result in double

counting of benefits. For example, some studies include reductions in expenditures on alcohol and illicit drugs as a component of avoided health care costs and use it as a proxy, albeit a poor one, for victim costs. However, tangible victim costs are typically included in the avoided crime cost benefit category.

Potential benefits at the individual drug user level include:

- Improved mental health and psychiatric functioning in terms of reducing anti-social personality, anxiety, depression, and enhancing self-esteem
- Reduced likelihood of physical disability
- Improved mortality through better physical health and less likelihood of physical assault
- Motivation to enhance job skills through additional schooling or vocational training
- Fewer motor vehicle accidents

Potential benefits at the family level of former drug users include:

- Improved child care with respect to their social functioning, instilling educational motivation, and reduced risk of passing a drug habit to children
- Reduced family violence and/or stress
- Improved housing conditions
- Better diets that promote health
- Improvements in financial planning and financial stability

Potential costs avoided by families that never use drugs include:

- Not having to move out of high crime/drug use neighborhoods
- Being unafraid to walk in your neighborhood at night
- Reduced protective behavior in terms of purchasing security devices, weapons, etc.

Additional social costs avoided include:

- Decreased property values in high crime/drug use neighborhoods
- Averting behavior that results in expenditures by communities to lower the risk of being a victim of drug users
- Public service programs via mass media or in school programs to create greater awareness of the perils and consequences of drug use
- Reduction in administrative costs of social programs that transfer income or provide in-kind benefits

Discussion of the Sensitivity Analysis

Conducting sensitivity analysis in conjunction with a benefit/cost analysis is a normal procedure given that parameter estimates, particularly benefit estimates, are subject to varying amounts of uncertainty as to their accuracy. From a statistical inference approach, sensitivity analysis can be carried out by calculating a confidence interval for an estimate (e.g., the estimate of additional employment income generated by drug treatment completers from pre- or post-treatment data or from completers-no treatment data). Based upon a calculated estimate, a confidence interval is constructed that contains a lower bound estimate and an upper bound estimate. The lower and upper bounds form the interval in which the true parameter (e.g., additional employment income generated) is said to lie with a certain degree of confidence (e.g., 95%). To increase the confidence of the additional employment income generated (e.g., 99%), the lower and upper bounds or interval becomes wider.

If the benefit/cost ratio exceeds one with using either the lower or upper bound estimate, then one can conclude that the program generates net benefits to society and the issue becomes how many dollars of net benefits per dollar cost of the program. If different conclusions emerge from using the lower versus the upper bound estimate, then a mid-range estimate may be chosen. It is beneficial simply to see the range of a benefit estimate.

The lack of in house data for the JCTC program precludes the use of the sensitivity analysis described above. Consequently, it was for this reason that a conservative approach was followed when a choice of estimates from the literature was available, the discount rate used, and the benefit categories chosen.

The estimated JCTC benefits are for a 12-month period, except avoided prison costs that extend out to five years. All categories of benefits are likely to generate benefits beyond one year but positive decay rates and present value calculation will likely result in smaller additional benefits for successive time periods.

Conclusions

Even though the perils of using data from the outcomes of other drug treatment programs to estimate benefits for the JCTC program have been noted above, the largest category of benefits, avoided prison costs, rely primarily on JCTC data and estimates of daily prison costs in Kansas extracted from Kansas Department of Corrections budget. Benefits from avoided prison costs alone total \$2,255,526 and exceed the FY04 JCTC costs of \$1,543,420.

Considering the present value of all benefits estimated for the JCTC program that equal \$2,637,117, yields a benefit/cost ratio of 1.71. This ratio is interpreted as meaning that for every dollar spent on the JCTC program, society receives \$1.71 in benefits. Due to data limitations, and specifically, the inability to measure certain benefits with high precision, the extent to which benefits exceed costs is not known. However, confidence can be placed in the fact that the benefit/cost ratio is greater than one, meaning that social benefits exceed economic costs.

A benefit/cost ratio greater than one means a project or program is cost effective but does not necessarily mean this is the most efficient use of public resources. There may be a program

or project that may yield a higher benefit/cost ratio. However, from a social welfare policy perspective, the benefit/cost ratio clearly suggests that the JCTC program enhances welfare and is cost effective even while recognizing that treatment does not benefit all clients. Once again, when choices were presented in estimating benefits, the conservative approach was chosen.

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Therapeutic Community Program Evaluation Survey



Conducted by
University Center for Survey Research
The Docking Institute of Public Affairs
Fort Hays State University
2005

Sponsored by
The Kansas Criminal Justice Coordinating Council

Directions: Please circle the best answer or write in the blanks provided. All responses will be kept strictly confidential. No one will be identified.

Demographics

1. What year were you born? _____

2. What is your gender? (circle one)

1 Male

2 Female

3a. Do you consider yourself. . . (circle one)

1 White

2 Black

3 Asian/Pacific Islander

4 American Indian or Alaskan Native

5 Multiracial

6 Other _____

3b. Are you... (circle one)

1 Non-Hispanic

2 Hispanic – Mexican origin

3 Hispanic – Other origin

4. What is the highest level of education you have completed? (circle one)

1 Less than high school _____

2 High school diploma or GED

3 Some college (no degree)

4 College degree (any degree or _____ grade certificate) → Q4a. Highest grade completed: _____ grade certificate)

Pre-Therapeutic Community

These questions refer to the period just before entering the JCTC program. If you do not remember when you entered the JCTC program, please look at the cover letter that was sent along with this survey. **Note: Some of you were in prison just before entering the program.** For you, the questions refer to the period just before entering prison.

Family and Housing Section

5. In the six months before JCTC (or prison), were you... (circle one)
 - 1 Single
 - 2 Married
 - 3 Divorced or Separated
6. How many children lived with you? _____
7. How many children were you responsible for supporting that did NOT live with you (lived with relatives, ex-spouse, or others)? _____
8. In the six months prior to entering JCTC (or prison), did you... (circle one)
 - 1 Rent or own a house, apartment, mobile home, etc
 - 2 Live rent-free with family or friends
 - 3 Stay in a shelter, group home, or half-way house
 - 4 Other _____
9. In the six months before JCTC (or prison), who did you live with? (circle one)
 - 1 No one, lived alone
 - 2 Wife or husband
 - 3 Girlfriend or boyfriend
 - 4 Parents or other relatives
 - 5 Roommates or friends
 - 6 Other _____

Employment and Income History Section

10. In the six months before JCTC (or prison), what was your working status? (Circle one)

- 1 Worked full-time or part-time → (Continue to 11a, **Working** Section)
- 2 Not Working, but looking for work → (Skip to 12a, **Looking For Work** Section)
- 3 Not Working, and **not** looking for work → (Skip to 13, **Not Looking For Work** Section)

WORKING SECTION

11a. In the six months before JCTC (or prison), did you work full-time or part-time?

- 1 Full-time
- 2 Part time

11b. How long did you have this job? _____ years and/or _____ months

11c. What was your hourly wage? \$_____ dollars per hour

11d. How many hours per week did you work? _____ hours per week

11e. What were some of the main activities or duties of your job?

11f. What job or vocational skills did you have? (Skills that you had even if not used on your job; for example: welding, construction, sales, or secretarial)

11g. At any time prior to JCTC (or prison), did you have problems getting a job?

- 1 Yes
- 2 No

11h. At any time prior to JCTC (or prison), were you fired for drug or alcohol-related reasons?

1 Yes

2 No

11i. In the six months prior to entering JCTC (or prison), about how many times per month did you usually miss work due to drug or alcohol-related causes (hangovers, passed out, overslept due to partying, lied about being sick, etc.).

Usually missed _____ times per month

NOW SKIP TO 14, THE "OTHER INCOME" QUESTION

LOOKING FOR WORK SECTION

In the six months before JCTC (or prison),

12a. How long had you been looking for work? _____ weeks

12b. What kind of job were you looking for?

12c. What job or vocational skills did you have? (For example: welding, construction, sales, or secretarial)

12d. Do you think that your prior drug or alcohol-related criminal history was keeping you from getting a job?

1 Yes

2 No

12e. At any time prior to JCTC, were you fired for drug or alcohol-related reasons?

1 Yes

2 No

NOW SKIP TO 14, THE "OTHER INCOME" QUESTION

NOT LOOKING FOR WORK SECTION

13. Which option below best describes why you were not looking for work?

- 1 Disabled or illness
- 2 In a school or training program
- 3 Taking care of the home or the children
- 4 Laid-off and waiting to be recalled to previous job
- 5 Got discouraged looking for a job and not finding one
- 6 Other _____

OTHER INCOME

14. In the six months prior to entering JCTC (or prison), how much did you receive monthly from the following sources? For all categories that apply, please tell us approximately how much you received, and if you received none write in zero (0).

<u>Source</u>	<u>Monthly Amount</u>
1 Unemployment benefits.....	\$_____ per month
2 Supplemental Security Income (SSI).....	\$_____ per month
3 Food Stamps.....	\$_____ per month
4 General Assistance (GA).....	\$_____ per month
5 Other _____.....	\$_____ per month

15. In the six months prior to entering JCTC (or prison) did someone (friend, family members) contribute to your support in any other way by providing housing, food, cash, etc?

- 1 Yes
- 2 No

16. What was your MAIN source of income just prior to your entry into JCTC (or prison)?

General Health Section

This section will ask about drug or alcohol-related visits to (and stays in) medical facilities.

17. In the six months before entering JCTC (or prison), about how many times did you just **visit** one of the following due to your drug or alcohol use? If you didn't have a visit during that time, enter 0.

- A. Emergency room or hospital? _____ times
B. Medical doctor or medical clinic? _____ times
C. Psychologist or psychiatrist? _____ times
D. Outpatient drug/alcohol facility? _____ times

And how many **days** in that time had you **stayed** in the following facilities due to your drug or alcohol use? If you didn't stay in a facility during that time, enter 0.

- E. Medical hospital? _____ days
F. Psychiatric hospital? _____ days
G. Inpatient drug/alcohol program? _____ days

(Please continue to the next page.)

Post-Therapeutic Community

These questions will ask about your life **after** the JCTC program. It refers to the last 30 days just before receiving this survey, or think in terms of the last month.

Family and Housing Section

18. In the last 30 days, were you... (circle one)

- 1 Single
- 2 Married
- 3 Divorced or Separated

19. How many children lived with you in the last 30 days? _____

20. In the last 30 days, how many children were you responsible for supporting that did NOT live with you (lived with relatives, ex-spouse, or others)? _____

21. In the last 30 days, did you... (circle one)

- 1 Rent or own a house, apartment, mobile home, etc
- 2 Live rent-free with family or friends
- 3 Stay in a shelter, group home, or half-way house
- 4 Other_____

22. In the last 30 days, who did you live with? (circle one)

- 1 No one, lived alone
- 2 Wife or husband
- 3 Girlfriend or boyfriend
- 4 Parents or other relatives
- 5 Roommates or friends
- 6 Other_____

Employment and Income History Section

23. In the last 30 days, what was your working status? (Circle one)

- 1 Worked full-time or part-time —————▶ (Continue to 24a, **Working** Section)
- 2 Not Working, but looking for work —————▶ (Skip to 25a, **Looking For Work** Section)
- 3 Not Working, and **not** looking for work▶ (Skip to 26, **Not Looking For Work** Section)

WORKING SECTION

24a. In the last 30 days, did you work either...

- 1 Full-time
- 2 Part-time

24b. How long have you had this job? _____ years and/or _____ months

24c. What is your hourly wage? \$_____ dollars per hour

24d. How many hours per week do you work? _____ hours per week

24e. What are some of the main activities or duties of your job?

24f. What job or vocational skills do you have? (Skills that you have even if not used on your job; for example: welding, construction, sales, or secretarial)

24g. Since being released from JCTC, have you had problems getting a job?

- 1 Yes
- 2 No

24h. Since being released from JCTC, have you been fired for drug or alcohol-related reasons?

1 Yes

2 No

24i. How many times in the last 30 days did you miss work due to drug or alcohol-related causes (hangovers, passed out, overslept due to partying, lied about being sick, etc)

Missed _____ times

NOW SKIP TO 27, THE "OTHER INCOME" QUESTION

LOOKING FOR WORK SECTION (In the past 30 days)

25a. How long have you been looking for work?

_____ weeks and/or _____ days

25b. What kind of job are you looking for?

25c. What job or vocational skills do you have? (For example: welding, construction, sales, or secretarial)

25d. Do you think that your prior drug or alcohol-related criminal history is keeping you from getting a job?

1 Yes

2 No

- 25e. Since being released from JCTC, have you been fired from a job for drug or alcohol-related reasons?
- 1 Yes
 - 2 No

NOW SKIP TO 27, THE "OTHER INCOME" QUESTION

NOT LOOKING FOR WORK SECTION

26. Which option below best describes why you are not looking for work?
- 1 Disabled or illness
 - 2 In a school or training program
 - 3 Taking care of the home or the children
 - 4 Laid-off and waiting to be recalled to previous job
 - 5 Got discouraged looking for a job and not finding one
 - 6 Other _____

OTHER INCOME

27. In the last 30 days, how much have you received from the following sources? For all categories that apply, please tell us approximately how much you received, and if you received none write zero (0).

<u>Source</u>	<u>Monthly Amount</u>
1 Unemployment benefits.....	\$_____ per month
2 Supplemental Security Income (SSI).....	\$_____ per month
3 Food Stamps.....	\$_____ per month
4 General Assistance (GA).....	\$_____ per month
5 Other _____	\$_____ per month

28. In the last 30 days, has someone (friend, family members) contributed to your support in any other way by providing housing, food, cash, etc?

1 Yes

2 No

29. What would you say was your MAIN source of income for the last 30 days?

General Health Section

This section will ask about drug or alcohol-related visits to (or stays in) medical facilities.

30. In the last 30 days, about how many times have you just **visited** one of the following due to your drug or alcohol use? If you didn't have a visit during that time, enter 0.

A. Emergency room or hospital? _____ times

B. Medical doctor or medical clinic? _____ times

C. Psychologist or psychiatrist? _____ times

D. Outpatient drug/alcohol facility? _____ times

In the last 30 days, about how many **days** have you **stayed** in the following facilities due to your drug or alcohol use? If you didn't stay in a facility during that time, enter 0.

E. Medical hospital? _____ days

F. Psychiatric hospital? _____ days

G. Inpatient drug/alcohol program? _____ days

Therapeutic Community Assessment Section

You have valuable information about the behaviors of those being served by the JCTC program. We want to learn about the experiences of JCTC participants without revealing information about any single person.

We would like you to answer the questions in this section while thinking about what the “average person” is like before they enter the JCTC program. This average person should include yourself and others that you know about. Again, no single person is identified using this method.

Prior to entering the JCTC Program:

31. What was the average person's three top drugs of choice? Please place a “1” by the drug most commonly used, a “2” by the second most commonly used, and a “3” by third most used. **After you have placed a “3” by the third most used, skip to 31a.**

- _____ Alcohol
- _____ Marijuana
- _____ Cocaine or Crack
- _____ Heroin
- _____ Meth
- _____ Ecstasy
- _____ Acid, Mescaline, Mushrooms
- _____ PCP, Angel Dust
- _____ Inhalants (inhaling paints, glues, aerosols)
- _____ Depressants (Barbs, Valium, Ludes)
- _____ Pain Killers (Vicodin, OxyContin, Codeine, Morphine)

31a. How much money would you say the average person spent on drugs or alcohol per week before entering the program? This would include money spent on **any** drugs or any alcohol products, not just those labeled above.

_____ dollars per week

32. Prior to entering the JCTC program, what crimes had the average person committed? If you circle yes to any of the crimes below, then go to the “days per month” column and enter the number of days per month the average person committed that crime.

	<u>Yes</u>	<u>No</u>	<u>Days per Month</u>
A. Theft.	1	2	_____
B. Robbery (taking money or property by force).	1	2	_____
C. Forgery (check washing, falsifying documents, signing another's name to a document).	1	2	_____
D. Prostitution.	1	2	_____
E. Aggravated assault.	1	2	_____
F. Burglary.	1	2	_____
G. Auto theft.	1	2	_____
H. Fencing (buying stolen property to resell it).	1	2	_____
I. Gambling.	1	2	_____
J. Selling drugs.	1	2	_____
K. Shoplifting.	1	2	_____
L. Other _____	1	2	_____

(Please continue to the next page)

Again, we would like you to answer the questions while thinking about the “average person”. This section is about what the average person is like after completing the JCTC program. Again, this average person should include yourself and others that you know about. No single person is identified using this method.

After completion of the JCTC Program:

33. Does the average person still have drug problems?

- 1 Yes
- 2 No

34. Are there certain drugs the average person is still using? Please place a “1” by the drug most commonly used, a “2” by the second most commonly used, and a “3” by third most used. **After you have placed a “3” by the third most used, skip to 34b.**

- _____ Alcohol
- _____ Marijuana
- _____ Cocaine or Crack
- _____ Heroin
- _____ Meth
- _____ Ecstasy
- _____ Acid, Mescaline, Mushrooms
- _____ PCP, Angel Dust
- _____ Inhalants (inhaling paints, glues, aerosols)
- _____ Depressants (Barbs, Valium, Ludes)
- _____ Pain Killers (Vicodin, OxyContin, Codeine, Morphine)

34b. How much money would you say the average person would spend on drugs or alcohol per week AFTER completing the JCTC program? This would include money spent on **any** drugs or any alcohol products, not just those labeled above.

_____ dollars per week

35. After completing the JCTC program, what crimes is the average person still committing? If you circle yes to any of the crimes below, then go to the "days per month" column and enter the number of days per month the average person commits that crime.

	<u>Yes</u>	<u>No</u>	<u>Days per Month</u>
A. Theft.	1	2	_____
B. Robbery (taking money or property by force).	1	2	_____
C. Forgery (check washing, falsifying documents, signing another's name to a document).	1	2	_____
D. Prostitution.	1	2	_____
E. Aggravated assault.	1	2	_____
F. Burglary.	1	2	_____
G. Auto theft.	1	2	_____
H. Fencing (buying stolen property to resell it).	1	2	_____
I. Gambling.	1	2	_____
J. Selling drugs.	1	2	_____
K. Shoplifting.	1	2	_____
L. Other _____	1	2	_____

(Please continue to the next page.)

36. Do you believe that the average person who enters JCTC is able to stop using drugs and alcohol once they leave the program?

1 Yes → 37a. Why? _____

2 No → _____

37b. Why not? _____

37. Do you believe that the average person who enters JCTC is able to stop committing crimes once they leave the program?

1 Yes → 38a. Why? _____

2 No → _____

38b. Why not? _____

General Program Assessments

38. Rate your agreement with the following statements applied to the JCTC Program, with 1 indicating "Strongly Disagree" and 5 indicating "Strongly Agree":

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
A. Overall, this is a good program.	1	2	3	4	5
B. Most clients take this program seriously.	1	2	3	4	5
C. I believe that this program has helped me.	1	2	3	4	5

39. Now we are going to ask whether the program has helped you in specific areas of your life. Please tell us the level of improvement you have experienced by indicating no improvement, some improvement, much improvement, or NA if the item does not apply to you. (i.e. If you have no children, you cannot rate improvement on parenting,)

	No Improvement	Some Improvement	Much Improvement	NA
A. Job performance	1	2	3	9
B. Education	1	2	3	9
C. Parenting	1	2	3	9
D. Stress	1	2	3	9
E. Anger/violence	1	2	3	9
F. Self-esteem	1	2	3	9
G. Physical health issues	1	2	3	9
H. Mental health issues	1	2	3	9
I. Family relationships	1	2	3	9
J. Finances/spending	1	2	3	9

40. Please use the space below to provide any comments you have about the program and how it has helped you.

41. Which of the following best represents your experience with this survey?

1. This survey was very difficult to complete.
2. This survey was difficult to complete.
3. This survey was easy to complete.
4. This survey was very easy to complete.

Thank you very much for your assistance!

Please tape the booklet shut and put it in the mail.
The postage is **pre-paid**.

Space for additional comments (if needed).